

IN THE UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF VIRGINIA
ALEXANDRIA DIVISION

IN RE: LUMBER LIQUIDATORS
CHINESE-MANUFACTURED FLOORING
PRODUCTS MARKETING, SALES
PRACTICES AND PRODUCTS LIABILITY
LITIGATION,

MDL No. 1:15-md-02627 (AJT/TRJ)

This Document Relates to ALL Cases

**PLAINTIFFS' MEMORANDUM IN OPPOSITION TO
MOTION TO EXCLUDE EXPERT REPORTS AND TESTIMONY OF FRANCIS J.
OFFERMANN, STEVEN A. VERHEY, AND DAVID E. JACOBS AS RELATED TO
DECONSTRUCTIVE TESTING**

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION	1
II. FACTUAL BACKGROUND	4
A. CARB Studied and Developed a Method for Preparing Test Specimens of MDF in Finished Goods Over Many Years.....	4
B. CARB Accounted for “Slight Variations” Inherent in the Sample Preparation and Emission Testing Process, and Determined that its Methodology Was Reliable.	8
C. Lumber Does Not Dispute that Plaintiffs’ Experts Are Qualified to Opine on the Use and Reliability of the Industry-Standard SOP.	10
1. Mr. Offermann	10
2. Dr. Steven A. Verhey.....	11
3. Dr. Jacobs.....	16
III. ARGUMENT	16
A. Precluding Plaintiffs’ Experts from Testifying about the Sample Preparation Methodology that Applies in this Field Would Hinder, Not Assist, the Jury.....	16
B. Lumber’s <i>Daubert</i> Attack on CARB’s SOP Is Incongruous with Lumber’s Prior Litigation Position: That the Court Should Respect CARB’s “Superior Expertise” on the Best Methodology for Preparing Samples for Testing.....	20
C. The <i>Daubert</i> Factors Confirm that Plaintiffs’ Experts Should Be Permitted to Assist the Jury in Understanding and Assessing the Officially Promulgated SOP.	21
1. The SOP Was Adopted Based on Extensive Testing Conducted by CARB with Participation by Industry-Stakeholders Like Defendant.....	21
2. The “Technique Has Been Subjected to Peer Review and Publication.”.....	24
3. There Is a Known or Potential Rate of Error that CARB and Plaintiffs’ Experts Reasonably Conclude Gives Rise to Reliable Results.....	25

4. There Is No Variability in the “Existence and Maintenance of Standards” – the SOP Is the Single Standard that Is Universally Used in this Field.27

5. CARB’s SOP Has “General Acceptance” in the Field.27

D. Lumber Can Argue that Finished Goods Should Be Tested in “Finished Form,” But that Legal Argument Is Not a Basis for the Court to Exclude Plaintiffs’ Experts From Relying on CARB’s SOP.....28

IV. CONCLUSION.....29

TABLE OF AUTHORITIES

	<u>Page(s)</u>
Cases	
<i>Abrams v. Nucor Steel Marion, Inc.</i> 2015 WL 6872511 (N.D. Ohio Nov. 9, 2015)	17
<i>B.F. Goodrich v. Betkoski</i> 99 F.3d 505(2d Cir. 1996), <i>clarified on den. of reh 'g</i> , 112 F.3d 88 (2d Cir. 1997)	18
<i>Bitler v. A.O. Smith Corp.</i> 400 F.3d 1227 (10th Cir. 2004)	23, 25
<i>Daubert v. Merrell Dow Pharms.</i> 509 U.S. 579 (1993).....	passim
<i>Denton v. Foster Poultry Farms, Inc.</i> 2013 WL 5924585 (W.D. La. Oct. 31, 2013)	24
<i>Edison Wetlands Ass'n, Inc. v. Akzo Nobel Chems., Inc.</i> 2009 WL 5206280 (D.N.J. Dec. 22, 2009)	17
<i>Fireman's Fund Ins. Co. v. Canon U.S.A., Inc.</i> 394 F.3d 1054 (8th Cir. 2005)	28
<i>Gilmore v. Shearson/American Express, Inc.,</i> 811 F.2d 108 (2d Cir. 1987).....	21
<i>Gross v. King David Bistro, Inc.</i> 83 F. Supp. 2d 597 (D. Md. 2000)	19, 23
<i>Hartle v. FirstEnergy Generation Corp.</i> 7 F. Supp. 3d 510 (W.D. Pa. 2014).....	19
<i>Hayes v. Raytheon Co.</i> 808 F. Supp. 1326 (N.D. Ill. 1992)	19
<i>Henricksen v. ConocoPhillips Co.</i> 605 F. Supp. 2d 1142 (E.D. Wash. 2009)	19
<i>Jones v. Otis Elevator Co.</i> 861 F.2d 655 (11th Cir. 1988)	18
<i>Little Hocking Water Ass'n, Inc. v. E.I. du Pont de Nemours & Co.</i> 90 F. Supp. 3d 746 (S.D. Ohio 2015)	17
<i>Maryland Cas. Co. v. Therm-O-Disc, Inc.</i> 137 F.3d 780 (4th Cir. 1998)	18, 21
<i>Pomona v. SQM N. Am. Corp.</i> 750 F.3d 1036 (9th Cir. 2014)	18, 24
<i>Ponca Tribe of Indians of Okla. v. Cont'l Carbon Co.</i> 2009 WL 4666037 (W.D. Okla. Jan. 16, 2009)	18
<i>Ruiz-Troche v. Pepsi Cola of Puerto Rico Bottling Co.</i> 161 F.3d 77 (1st Cir. 1998).....	18
<i>Sanchez v. Boston Scientific Corp.</i> 2014 WL 4851989 (S.D.W. Va. Sept. 29, 2014)	25

Schwab v. Nissan N. Am., Inc.
502 F. Supp. 2d 980 (E.D. Mo. 2007)..... 19

Tuscumbia City Sch. Sys. v. Pharmacia Corp.
2015 WL 627960 (N.D. Ala. Feb. 12, 2015) 18

U.S. v. Dorsey
45 F.3d 809 (4th Cir. 1995) 28

United States v. Dico, Inc.
266 F.3d 864 (8th Cir. 2001) 17

United States v. Hassan
742 F.3d 104 (4th Cir. 2014) 23

Westberry v. Gislaved Gummi AB
178 F.3d 257 (4th Cir. 1999) 28

Wright v. Jeep Corp.
547 F. Supp. 871 (E.D. Mich. 1982)..... 25

Statutes

17 C.C.R. § 93120.2(a)(4) 4

17 C.C.R. § 93120.9..... 4

Rules

Federal Rule of Evidence 702..... 3, 17

I. INTRODUCTION

This case will require the jury to decide whether the medium density fiberboard (“MDF”) in Lumber Liquidators’ (“Lumber”) laminated flooring products emitted formaldehyde at levels above the limit set by California’s Airborne Toxic Control Measures (“ATCM” or the “Regulation”). The Regulation requires that MDF contained in finished goods comply with stated emission limits. The Regulation specifies which test methods must be used for measuring formaldehyde emissions from the MDF, but does not specify how the MDF should be removed from the finished goods to be tested. Therefore, the California Air Resources Board (“CARB”), the agency that promulgated the Regulation and is charged with enforcing it, published a Standard Operating Procedure (“SOP”) for preparing samples of MDF contained in finished goods for testing. After a six-year process of conducting studies, meeting with industry groups and companies (including Defendant), and considering data from third parties, and after publishing the results of its studies for both internal and external review, CARB concluded that the best way to prepare a sample of MDF in a finished good for testing is to remove the laminate and expose the MDF before testing. Based on a series of tests and measurements, it determined that the laminate and glue should be removed from the MDF to a depth of 0.01-0.02 inches using a planer or sander. Accredited third-party labs across the country that test MDF for CARB compliance use the SOP to prepare samples of MDF in finished goods for testing. There is no recognized or accepted competing method of sample preparation for purposes of determining CARB compliance.

Using the industry-standard SOP, followed by the emission testing methodology specified in the Regulation (which Lumber does not challenge), laboratories retained by Plaintiffs tested Lumber’s laminate flooring products and found that they grossly exceeded the formaldehyde emission limit, often by many multiples. Those results will be presented to the jury in this case.

In the present Motion, Lumber uses the *Daubert v. Merrell Dow Pharmaceuticals*, 509 U.S. 579 (1993) standard to try to prevent the jury from hearing *any* expert testimony from Plaintiffs about their tests by specifically targeting not the test methodology itself, but merely the sample preparation method in CARB's SOP – *i.e.*, the process of planning or sanding off the laminate layer to expose the MDF. In short, Lumber has seized upon this minor step in the process as a backdoor to preclude testimony about damning evidence. To attack this step, Lumber claims that the process of removing the laminate, which CARB concluded was reliable, is so drastically unreliable that the jury may not even hear about it. Lumber does not, of course, claim that its products would, in fact, be found to comply with the Regulation if a different method of exposing the MDF sample had been used.

Lumber's unconventional use of *Daubert* is inconsistent with a large body of case law, and is unsupported by the cases Lumber cites. The purpose of *Daubert* is to ensure that the jury hears expert testimony about “scientific, technical, or other specialized knowledge [that] will assist the trier of fact to understand the evidence or to determine a fact in issue.” Granting Lumber's motion would do the opposite; it would deprive the jury of adversarial testimony about how the official CARB sample preparation method works, its alleged merits and flaws, and the manner in which it was used to generate results showing the formaldehyde emitted from the MDF cores in Lumber's products. Lumber would have the jury hear only from its attorneys and experts, who are being paid to attack CARB's impartial methodology. Lumber does not challenge the qualifications of Plaintiffs' experts, nor does it argue that their opinions are irrelevant. Indeed, Lumber has itself previously argued that CARB has far greater “expertise” about deconstructive testing than a court, such that the Court should not second-guess CARB's view of the best sample preparation method. The usefulness to the jury of the testimony in question is, on its own, sufficient under Federal Rule

of Evidence 702. Lumber will be free to challenge the accuracy of Plaintiffs' experts' opinions through its own experts and on cross-examination. Its quibbles regarding a sample preparation method go to the weight of the evidence, not its admissibility.

Application of the *Daubert* factors, 509 U.S. at 593-94, confirms that the Motion lacks merit:

First, the technique in question (*i.e.*, removing the laminate covering to a depth of 0.01 to 0.02 inches to expose the MDF core in order to test it) has been tested by CARB, an impartial, expert agency, with cooperation from industry participants.

Second, the "technique has been subjected to peer review and publication." This is not a novel technique. It is a simple sample preparation method that was thoroughly reviewed before being finally adopted and published by an impartial governmental agency. It has subsequently been reviewed by an industry association and found to be a viable method. And it is currently being practiced in the regular course of business at certified laboratories across the country, where it is relied upon day in and day out by industry participants.

Third, there is a "known or potential rate of error" of the method, which CARB and Plaintiffs' experts can explain to the jury based on testing data CARB made public. Lumber fixates on CARB's internal uncertainty factor – *i.e.*, the amount by which a test result must exceed the legal limit before CARB will commence an enforcement action. This, however, is a red herring: that CARB may decide not to prosecute companies whose samples are barely over the threshold is no basis to exclude expert testimony about test results showing that Lumber's products exceeded the Regulation limits many times over.

Fourth, the "existence and maintenance of standards controlling the technique's operation" cannot be disputed: that is the entire reason that CARB published a uniform SOP.

Fifth, the theory or method has been generally accepted by the relevant scientific community. CARB's sample preparation method is the *only* method used in the field, the *only* method used by the agency charged with enforcement. Lumber has not proffered any competing method. In fact, Lumber agreed to comply with CARB's SOP in a recent settlement with CARB.

The real position driving the Motion is not that there is a flaw in CARB's sample preparation method, but that "finished goods" themselves should be tested, rather than the MDF contained in those goods. That is a legal contention about what the Regulation requires, not a challenge to the reliability of lamination removal. The Court should deny the Motion.

II. FACTUAL BACKGROUND

A. CARB Studied and Developed a Method for Preparing Test Specimens of MDF in Finished Goods Over Many Years.

In April 2007, CARB enacted the ATCM to regulate emission levels of formaldehyde from MDF, including MDF contained in finished goods like the laminate flooring at issue in this case. *See* 17 C.C.R. § 93120.2(a)(4). According to Lynton Baker, the supervisor of CARB's Monitoring and Laboratory Division and one of the authors of the ATCM who helped draft the Regulation, the Regulation is "very clear" that "[t]he composite wood material in the finished goods is required to comply with [the] emission standards."¹ Although the Regulation specifies the tests that must be used to measure formaldehyde emitted from a sample of MDF, 17 C.C.R. § 93120.9, it does not specify a method for first *removing* the MDF from a finished good in order to test it. Because the ATCM regulates the MDF core itself, not the finished good, and because laminate can impede the formaldehyde that will be emitted during a test,

¹ Declaration of Nancy L. Fineman in Support of Plaintiffs' Opposition to Motion to Exclude Expert Reports and Testimony of Francis J. Offermann, Steven A. Verhey, and David E. Jacobs as Related to Deconstructive Testing, (hereinafter "Fineman Decl."), Exhibit 1, Deposition of Lynton Baker dated March 15, 2016, ("Baker Dep.") at 156:6-13; 157:4-6.

CARB recognized that the laminate must be removed before testing to determine the amount of formaldehyde that can be released from the MDF core.² Therefore, as CARB explained, “Deconstructive testing is needed for finished goods to verify compliance with the emission standards. We are currently developing the sample preparation and testing protocols that we will use to enforce the ATCM.”³ CARB continued: “The sample preparation and emission testing protocol we use to enforce the ATCM will be technically sound and will be more than adequate to identify non-compliant composite wood products found in finished goods for California.”⁴

From the outset, CARB involved industry participants to reach a standardized method for removing laminate from finished goods in order to accurately test the MDF core. Mr. Baker explained that “the composite wood products industry recognized that we were going to need to determine how to test composite wood material that was contained in finished goods, and the composite wood products industry had a couple of decades of experience,” so CARB formed a “Joint Task Group on Deconstructive Testing” composed of companies or trade groups within the industry.⁵ Mr. Baker further explained that “the composite wood products industry committed to do some testing on our behalf to help us develop our procedures for testing composite wood material contained in finished goods.”⁶ The minutes of the Joint Task Force meeting from September 2008 show that industry participants had “conducted a literature review

² See Fineman Decl., Ex. 1, Baker Dep. at 96:19-97-21; Lumber’s own expert similarly conceded the fact that laminate can impede the release of formaldehyde. See Fineman Decl., Ex. 2, Deposition of Gregory D. Smith, dated May 17, 2016, at 58:11-59:3.

³ See Fineman Decl., Ex. 3, Final Statement of Reasons for Rulemaking, at 42, available at <http://www.arb.ca.gov/regact/2007/compwood07/fsorcompwood07.pdf> (citing Initial Stmt. of Reasons for Prop’d Rulemaking, at 127).

⁴ *Id.*

⁵ Fineman Decl., Ex. 1, Baker Dep. at 58:3-59:18.

⁶ *Id.*

on deconstructive testing and outlined a three phase project plan,” and that CARB itself “had a deconstructive testing project plan under internal review and that the project plan was similar to the project plan [the industry groups] outlined.”⁷ The minutes note that CARB would be “creating a database of finished product test data to better understand the complicated matrix and multitude of products and assembly techniques,” and that the database would “be generated over time and include several years of data.”⁸ CARB shared its proposed methodology with the industry groups early in the process.⁹ California’s Department of Public Health’s lab also collaborated with CARB in developing the SOP.¹⁰ CARB spent approximately six years performing tests and considering options before it adopted the sample preparation method that Lumber now challenges in this Motion.¹¹

During those six years, CARB conducted “extensive testing” in formulating the SOP, and “the testing data that ARB developed in arriving at sample preparation procedures” is “public data.”¹² Some of the data had been gathered and extensively analyzed by CARB and industry participants already in September 2008, and was submitted along with the minutes of the Joint Task Group.¹³ In particular, the industry participants conducted various alternative methods of deconstruction to explore which were most reliable, and reported to CARB and the rest of the

⁷ Fineman Decl., Ex. 4, Minutes of the Joint Task Group on Deconstructive Testing Conference Call, dated September 25, 2008, (Baker Dep. Ex. 12) at 2.

⁸ *Id.* at 2-3.

⁹ Fineman Decl., Ex. 1, Baker Dep. at 61:7-24.

¹⁰ *Id.* at 63:4-65:6.

¹¹ *Id.* at 58:3-16, 61:25-62:11, 88:22-90:24 & Fineman Decl., Ex. 5, CARB’s Standard Operating Procedure for Finished Good Test Specimen Preparation Prior to Analysis of Formaldehyde Emissions from Composite Wood Products, dated September 13, 2013, (Baker Dep. Ex. 25); *see also* www.arb.ca.gov/enf/compwood_sop_fg_decon_091313.pdf.

¹² Fineman Decl., Ex. 1, Baker Dep. at 75:13-76:1.

¹³ Fineman Decl., Ex. 4, (Baker Dep. Ex. 12) (Joint Task Group Minutes, attaching 21 pages of initial data and analysis with input from six different companies).

group on their detailed analysis of the results.¹⁴ Ultimately, CARB obtained MDF samples from six different fabricators and relied on emissions tests conducted on both (a) the raw MDF (*i.e.*, before it was incorporated into a finished good), and (b) the same MDF after it had been incorporated into a finished good, and had then been prepared for testing by removing the resin and veneer at various levels of depth.¹⁵ The results include at least 50 samples and are all publicly available on CARB's website.¹⁶ Even this subset of 50 tests shows that adding and then removing veneer and resin, regardless of the depth of the removal, has minimal impact on the emission reading from the product.¹⁷ In sample after sample, the readings before the resin and veneer were applied are within one or two parts per million ("ppm") of the reading after the sample was "deconstructed" and measured, with occasional outliers upward or downward.¹⁸ Contrary to an incorrect assertion in Lumber's Motion, CARB also relied on data obtained from testing samples of laminated (as opposed to veneer) products, the results of which were also made public and presented at a public industry workshop.¹⁹

Based on its testing and testing by third parties, CARB requires removal of material to a depth of 0.01 to 0.02 inches below the glue line, because CARB "found that going that depth below gave the best results in ... comparison to the raw panel."²⁰ Also, Plaintiffs' expert Francis Offermann notes that both CARB's study and a separate industry study confirm that the SOP is

¹⁴ *Id.* at attachment pages 1-21.

¹⁵ Fineman Decl., Ex. 1, Baker Dep. at 82:12-88:7.

¹⁶ *See* Fineman Decl., Ex. 6, www.arb.ca.gov/toxics/compwood/laminated.pdf, (a copy of which was entered as Ex. 24 to Mr. Baker's deposition).

¹⁷ *Id.* at pp. 6-8.

¹⁸ *Id.*

¹⁹ Fineman Decl., Ex. 1, Baker Dep. at 88:12-18; *cf.* Lumber's Memorandum in Support of Motion To Exclude Expert Reports and Testimony of Francis J. Offermann, Steven A. Verhey, and David E. Jacobs as Related to Deconstructive Testing ("Lumber Mot.") at 6, omitting the relevant testimony and asserting without a citation that "CARB's study was limited to products featuring a *veneer* layer, and not a laminate layer like the products implicated in this litigation."

²⁰ Fineman Decl., Ex. 1, at 115:5-22.

a sensible and reliable sample preparation method. He notes that using the SOP to prepare finished goods for testing “compared best with the raw panel emissions.”²¹

The SOP, like CARB’s procedure for conducting the emission testing itself (which Lumber does not challenge), was “reviewed and approved by the management” of the CARB division overseeing laboratory testing.²² “The SOP for preparing finished goods samples was not only reviewed internally, it was also externally reviewed.”²³ The purpose of the SOP “is to describe the procedures that we’ve used to prepare finished goods so that [MDF] contained in those finished goods can be tested” to determine whether the ATCM emission limits have been exceeded.²⁴ This is the methodology that CARB expects industry participants and independent third-party laboratories to use when they test the MDF in finished goods.²⁵

B. CARB Accounted for “Slight Variations” Inherent in the Sample Preparation and Emission Testing Process, and Determined that its Methodology Was Reliable.

As with nearly every testing methodology, the CARB sample preparation and emission testing process involves some degree of imprecision. Mr. Baker testified: “With any sample preparation – with any test method, there is some uncertainty... In the case of finished goods testing, we have uncertainty and variability associated with the sample preparation,” and “ARB internally ha[s] data on what that variability and uncertainty factor is.”²⁶ In reviewing and adopting the SOP, CARB examined data collected by CARB’s Monitoring and Laboratory

²¹ Ex. 11 to Lumber Mot., Offermann Report at ¶ 92 & Ex. I (CARB Study) (also attached as Fineman Decl. Ex. 6, at 2).

²² Fineman Decl., Ex. 1, Baker Dep. at 81:9-23, 89:12-9:24.

²³ *Id.* at 90:20-22.

²⁴ *Id.* at 91:7-15.

²⁵ *Id.* at 100:24-106:22.

²⁶ *Id.* at 46:22-48:1.

division and data from other third party laboratories. CARB observed that there were “slight variations” from one specimen to another, and that “that uncertainty is minimal.”²⁷

Mr. Baker used an analogy that is particularly apt in relation to this Motion:

If you have three radar guns looking down the highway at a car going by evaluating whether it’s going 65 miles an hour or not, you’re going to get three slightly different readings... Those radar guns are not exact, but they’re, you know, plus or minus a couple miles an hour. The – our test methods, the procedures that a third party certifier reviews similarly are – they’re close, but there is a little bit of variation. So can a third party certifier determine whether it was compliant and would we think it was compliant? If it’s just slightly above the emission standard, it may be in that gray area. If it’s way above, or in the highway patrolman radar gun situation, if it’s 75 in the 65 zone, then all the radar guns will agree, you’re definitely in excess of the speed limit.... So if [a sample of MDF found in a finished good] came back drastically over the emission standard, then ... I would hope the third party certifier would tell their client they didn’t use compliant [MDF] platform material to make this piece of flooring.²⁸

In other words, like many measuring methods, there is some imprecision in both the SOP and the emission test, but that does not render them unreliable. Moreover, there can be no real dispute that sample preparation using the SOP followed by emissions testing of the sample reliably detects the kind of violations of the emission limit at issue in this case.

Because there is some imprecision, CARB does not take enforcement action unless products exceed the legal limit by a small margin, which CARB refers to as its “uncertainty factor.” CARB does not publish its uncertainty factor, as doing so would enable industry participants to feel safe using MDF that emitted formaldehyde above the legal limit but below the enforcement threshold. But the fact that CARB would not take enforcement action does not mean the goods would be compliant. As Mr. Baker testified, a good that exceeds the limit

²⁷ *Id.* at 43:6-25.

²⁸ *Id.* at 48:24-51:13.

“would not comply with our regulation” even if the violation was small enough that CARB “would not necessarily take enforcement action.”²⁹

In arguing that use of the SOP creates a level of unreliability so extreme that the jury should not even hear expert testimony about test results on samples prepared using the SOP, Lumber cites to a study by the American Home Furnishings Alliance (“AHFA”), which gave rise to the “possibility” that *some* samples of MDF that initially tested as compliant could test as non-compliant after being laminated and having the laminate removed. But CARB took these findings into consideration. As Mr. Baker noted, CARB was “certainly aware of” the findings in this study when developing its SOP – the AHFA was one of the industry groups that CARB invited to assist it in deciding upon an SOP.³⁰ With the benefit of the AHFA’s input, CARB demonstrated through testing, and ultimately concluded, that the SOP is the best and most accurate method of removing MDF from finished goods for testing.

C. Lumber Does Not Dispute that Plaintiffs’ Experts Are Qualified to Opine on the Use and Reliability of the Industry-Standard SOP.

1. Mr. Offermann

Francis Offermann has more than thirty years’ experience in chemical exposure assessment in indoor environments.³¹ He is the President of Indoor Environmental Engineering (“IEE”), a Certified Industrial Hygienist (“CIH”), a Mechanical Engineer, and has published numerous scientific papers on indoor air quality, including chemical emissions studies. He is a voting member of both ASTM D-22 Sampling and Analysis of Atmospheres and ASTM E-06, Performance of Building Construction, and contributes to the development and maintenance of standard methods

²⁹ *Id.* at 155:4-11.

³⁰ *Id.* at 66:17-68:25.

³¹ Ex. 11 to Lumber Mot., Offermann Report at ¶ 1.

for measuring indoor formaldehyde emission rates, including the two formaldehyde emission tests specifically referenced in the ATCM. Mr. Offermann was the Principal Investigator of the California New Homes Study (2005-2007), which measured indoor air quality, ventilation rates, and formaldehyde emission rates in 108 new single-family homes in California. This study identified laminate flooring as being a major source of indoor formaldehyde concentrations, and led to the 2007 creation of the ATCM formaldehyde emission limits at issue in this case.³²

Mr. Offermann's report outlines reasons deconstructive sample preparation is required to accurately measure formaldehyde emissions from the MDF in finished products.³³ The report describes studies that support the accuracy of the SOP and explains how each of those studies measured differences between emissions from a raw composite wood product and emissions from that same product after it had been converted into a finished good and then "deconstructed" according to the SOP. His report then explains why those measurements lead to the conclusion that the SOP is a reliable method of measuring emissions from MDF core in finished goods.³⁴

Offermann's report then explains that testing of Lumber's products using the SOP has resulted in violations of the emission limit that vastly exceed the margin of error that can be expected based on the data in the CARB and AHFA tests.³⁵

2. Dr. Steven A. Verhey

Dr. Verhey is the Vice President in charge of Panel Products (including MDF) at PFS TECO (a CARB-certified laboratory). He holds a Ph.D. in Forest Science, and an M.S. and B.S.

³² *Id.* at ¶¶ 2-8.

³³ *Id.* ¶ 85; *compare with* ¶¶ 22-38 (describing shortcomings of testing sealed finished flooring products without first removing the laminate); *see also* ¶¶ 91-95 (describing studies concluding that the deconstruction process does not substantially alter the emission rates of formaldehyde from the core materials).

³⁴ *Id.* ¶¶ 92-94.

³⁵ *Id.* ¶ 95.

in Chemistry.³⁶ He has more than 12 years' experience in the testing and certification of wood-based composites, including MDF.³⁷ Dr. Verhey is a member of ASTM D07 and D14 committees, which promulgate the testing standards for emission of formaldehyde from MDF and other wood products specifically referenced in the ATCM.³⁸ Dr. Verhey has specialized knowledge of methods for testing formaldehyde, including: standardized chamber tests (ASTM E1333, ASTM D6007), gas analysis methods (EN 717-2), desiccator tests, (JIS A1460 and ASTM D5582), formaldehyde content testing (EN 120 and Perten NIR machine), and specialized chamber tests developed for quality assurance testing at mills that produce MDF. Additionally, Dr. Verhey has specialized knowledge of analytical methods used in quantifying formaldehyde, including: common wet chemistry (uv-visible chromatography), electrochemical methods (Interscan sensor), near infrared spectroscopy, and chromatography (derivitization of aldehydes and ketones using DNPH).³⁹

Dr. Verhey's employers, PFS Corporation and TECO, are CARB Third Party Certifiers.⁴⁰ Dr. Verhey has worked in more than 45 wood panel manufacturing complexes in 10 countries, including more than 25 mills in 8 countries, performing work applying the Formaldehyde ATCM.⁴¹ Dr. Verhey has a detailed understanding of the manufacturing techniques and technology used in the industry, including those used by companies in China.⁴² He is a frequent participant in industry meetings and worked with CARB in its development of the ATCM.⁴³

³⁶ Ex. 12 to Lumber Mot., Verhey Report ¶ 2.

³⁷ *Id.*

³⁸ *Id.* ¶ 4.

³⁹ *Id.*

⁴⁰ *Id.* ¶ 5.

⁴¹ *Id.*

⁴² *Id.* ¶ 6

⁴³ *Id.*

The portions of Dr. Verhey's report that have not been stricken by Magistrate Judge Jones's Order (ECF Nos. 1015 and 1033, pending Plaintiffs' Rule 72 Objections at ECF No. 1016) include the following: *First*, Dr. Verhey explains that Lumber's expert Dr. Gregory Smith, in attacking the SOP by asserting that the lamination process changes the formaldehyde content of the MDF core such that CARB's SOP is unreliable, bases his opinion on a fundamental misstatement of how laminate is applied to MDF.⁴⁴ Specifically, Dr. Smith, who has virtually no experience in the production of laminated MDF products, asserts that laminate is affixed to MDF using a formaldehyde resin that can contaminate the MDF and lead to higher test results if the laminate is removed and the MDF is tested.⁴⁵ Dr. Verhey explains that the process that Dr. Smith describes "is not actually the process that is used to make composite laminate flooring," and has not been "[f]or at least the past 20 years" – currently, no additional layer of resin is used in the manufacturing process, and therefore it cannot possibly have the effect Dr. Smith claims.⁴⁶ Dr. Verhey explains how the process actually works, and explains that this is confirmed by the technical manual upon which Dr. Smith purported to rely.⁴⁷ He also explains that the resin postulated by Dr. Smith does not appear in the product specifications for Lumber's products, and would not be practical.⁴⁸

Second, Dr. Verhey rebuts the assertion of Lumber expert John Dunlap that a list of CARB-compliant mills issued by CARB was intended to be relied upon by retailers in lieu of taking independent steps to verify that they were selling products that did not violate the ATCM.⁴⁹ As the supervisor of CARB-certified laboratories, a member of the ASTM committees that

⁴⁴ *Id.* ¶¶ 7-9.

⁴⁵ *Id.* ¶ 8 (citing Dr. Smith's report).

⁴⁶ *Id.* ¶¶ 8-9.

⁴⁷ *Id.* ¶¶ 11-14.

⁴⁸ *Id.* ¶¶ 15-19.

⁴⁹ *Id.* ¶¶ 35-36.

promulgate the tests used by CARB, and a participant in the meetings with CARB that led to the development of the ATCM, he has expertise that allows him to rebut Mr. Dunlap's opinion.

The portion of Dr. Verhey's report that has been stricken by Magistrate Judge Jones (again, subject to Plaintiffs' pending objections) opines that the CARB SOP is a reliable sample preparation method for testing formaldehyde emissions for compliance with the ATCM.⁵⁰ Specifically, Dr. Verhey responds to the opinions of Lumber's expert witnesses McCarthy, Smith, and Wait, each of whom attacks CARB's SOP.⁵¹ He notes that in addition to CARB's study of its experiments with deconstruction and a technical review of CARB's study by the Hardwood Plywood & Veneer Association, the CARB SOP "has been in use throughout the industry and has proven to be a reliable tool to determine whether the formaldehyde content in the composite cores of finished laminated products emits more formaldehyde than is permitted by the ATCM."⁵² He describes his experience applying the SOP to prepare samples from finished goods for testing, as well as performing the subsequent testing for emissions from the samples, which he has done for "multiple clients with stakes in the industry" (*i.e.*, Lumber's competitors), in addition to testing many of the products at issue in this case.⁵³ He states that "[a]lmost universally, the only products where results have shown cores that are likely to exceed CARB's formaldehyde limits were from Lumber Liquidators' Chinese-manufactured composite laminate products."⁵⁴ "Deconstructive tests on similar flooring products that were manufactured outside of China and similar products from other retailers have almost universally shown formaldehyde levels that are at or below CARB phase II limits."⁵⁵

⁵⁰ *Id.* ¶¶ 20-34.

⁵¹ *Id.* ¶ 20.

⁵² *Id.*

⁵³ *Id.* ¶ 21.

⁵⁴ *Id.* ¶ 22.

⁵⁵ *Id.*

In the portion struck by Magistrate Judge Jones, Dr. Verhey also responds to Lumber's experts' claims that only CARB can enforce that ATCM and that CARB's confidential "uncertainty factor" makes it impossible for others to assess whether composite wood products exceed the emission limits of the ATCM. Dr. Verhey explains that third-party certified labs, such as his, are retained by industry participants to perform the CARB-approved tests and advise whether the readings exceed the ATCM limits.⁵⁶ He explains that the industry's understanding is that CARB's uncertainty factor is "not likely to be more than 0.04-0.05 [parts per million (ppm)]" above the ATCM limit of 0.11 ppm, and that the approximately 100 tests he has performed or supervised on Lumber's Chinese-manufactured laminate flooring products (tests that have been submitted in this case and not excluded by Magistrate Judge Jones's order) have averaged "more than 6 times CARB phase II limits and well past any value that allows a reasonable uncertainty factor."⁵⁷

Also in the portion struck by Magistrate Judge Jones, Dr. Verhey rebuts the contention by Lumber's experts that emission tests should be performed on "finished goods" without removing the laminate to measure emissions from the core itself.⁵⁸ Among other reasons (apart from the fact that it is "not permitted by the CARB regulation"), the "amount of formaldehyde emitted from the raw core wood composite constitutes the potential formaldehyde that can be released into the ambient air in a home over the life of the floor," while testing a "laminated and sealed piece of flooring would indicate nothing in the real world use of the product" because it "constitutes nothing more than a snapshot of a product in an unrealistic condition," and "does not reflect the potential

⁵⁶ *Id.* ¶ 23.

⁵⁷ *Id.* ¶¶ 24-26.

⁵⁸ *Id.* ¶¶ 27-34.

or actual release from the product in real world conditions.”⁵⁹ As a top expert in the field of formaldehyde emission testing, he describes why the industry non-standard test proposed by Lumber’s experts is unjustifiable, and opines that “[w]hen considered carefully, it is clear that such tests have no use beyond perhaps a public relations gimmick.”⁶⁰

3. Dr. Jacobs.

Dr. Jacobs is an Industrial Hygienist. His qualifications are not disputed. He is relevant to this Motion to the extent that his report references the results of certain tests conducted using the SOP.⁶¹

III. ARGUMENT

A. Precluding Plaintiffs’ Experts from Testifying about the Sample Preparation Methodology that Applies in this Field Would Hinder, Not Assist, the Jury.

The jury will be presented with evidence that Lumber’s products emitted formaldehyde at levels many times the ATCM limit when tested using the procedures CARB requires. In an effort to prevent the jury from hearing Plaintiffs’ experts discuss and defend this evidence, and to limit the jury to hearing only the attacks of its own experts on this evidence, Lumber hopes to persuade the Court that one link in the testing evidence – not the test method itself (which Lumber does not challenge) but simply the method of preparing the samples for testing – creates such gross unreliability that the jury cannot even hear from Plaintiffs’ experts about the tests at all. If Lumber’s own paid experts are given sole audience with the jury, without adversarial testimony from Plaintiffs’ experts, who would explain how the official methodology works, why it is reliable, and why Lumber’s experts’ purported critiques are insignificant, then Lumber would likely

⁵⁹ *Id.* ¶¶ 28, 24.

⁶⁰ *Id.* ¶¶ 29-34.

⁶¹ *See* Lumber Mot. at 11 (“Dr. Jacobs offers no direct opinions regarding the accuracy and validity of the Deconstructive Testing Protocol.”).

mislead the jury into ignoring valid, reliable testing evidence. Under Federal Rule of Evidence 702, keeping Plaintiffs' expert assistance from the jurors in this case would allow them to be misled, not "assist" their accurate resolution of the case.

Attacks on agency-promulgated methodologies under *Daubert* are almost uniformly rejected for two reasons: (1) agency-adopted methodologies tend to be reliable enough to present to juries, and (2) challenges to the agency methodology go to the weight of the evidence, not its admissibility. *Daubert*, 509 U.S. at 596 ("Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking" allegedly flawed evidence); *United States v. Dico, Inc.*, 266 F.3d 864, 870 (8th Cir. 2001) (rejecting challenge to methodology as unreliable where "the model is sanctioned by the EPA and is considered a standard model," and "the sufficiency of the factual basis of [the expert's] theory was open to any challenge [Defendant] desired to mount on cross-examination"); *Abrams v. Nucor Steel Marion, Inc.*, 2015 WL 6872511, at *4 (N.D. Ohio Nov. 9, 2015) (where expert used "EPA's preferred program for modeling emission dispersions," defendant could explore "shortcomings" of opinion through cross-examination, but to exclude it would "confuse the *credibility and accuracy* of [the] opinion with its *reliability*") (quotation omitted); *Little Hocking Water Ass'n, Inc. v. E.I. du Pont de Nemours & Co.*, 90 F. Supp. 3d 746, 763 (S.D. Ohio 2015) (admitting methodology that "government agencies rely upon" and noting that "[e]ven if the alleged flaws in [expert's] methodology exist" the court was not "persuaded they are 'large' enough ... that [the expert] will not assist the trier of fact"); *Edison Wetlands Ass'n, Inc. v. Akzo Nobel Chems., Inc.*, 2009 WL 5206280, at *4 (D.N.J. Dec. 22, 2009) (expert who applied EPA's risk assessment methodology would not be excluded – "perceive[d] weaknesses in [his] assumptions" could "be addressed on cross-examination"); *Ponca Tribe of Indians of Okla. v.*

Cont'l Carbon Co., 2009 WL 4666037, at *5-6 (W.D. Okla. Jan. 16, 2009) (where expert estimated emission levels using EPA's recommended analysis, defendant "can question [the expert] at trial regarding the process he followed," but the "methodology meets the required degree of reliability"). To exclude testimony about an agency-approved methodology, particularly one that industry participants routinely apply, would be contrary to the case law.⁶²

Other defendants, like Lumber, whose conduct has been alleged to violate agency regulations, have similarly tried to avoid liability by taking unorthodox positions at odds with that of the agency – but in such cases, the question is not whether the *agency's* methodology may be presented to the jury, but whether the *defendant's non-standard approach* passes the *Daubert* test. *See, e.g., Tusculumbia City Sch. Sys. v. Pharmacia Corp.*, No. CV-12-S-332-NW, 2015 U.S. Dist. Lexis 17199, at *13 (N.D. Ala. Feb. 12, 2015) (excluding expert testimony based on tests that did not follow protocols "required by the EPA for PCB testing"); *Schwab v. Nissan N. Am., Inc.*, 502

⁶² Lumber (Lumber Mot. at 13) quotes from the pre-*Daubert* case of *Jones v. Otis Elevator Co.*, 861 F.2d 655, 662 (11th Cir. 1988), for the proposition that experts must rely on facts, not "conjecture or speculation," but Lumber omits the court's holding, two sentences later, admitting the testimony because the alleged "weaknesses in the underpinnings of the expert's opinion go to its weight rather than its admissibility." The Fourth Circuit, and others, similarly highlight the importance of allowing the adversarial process to do its job. *See, e.g., Pomona v. SQM N. Am. Corp.*, 750 F.3d 1036, 1044 (9th Cir. 2014), *cert. denied*, *SQM N. Am. Corp. v. City of Pomona*, 135 S. Ct. 870, 190 L. Ed. 2d 703, 2014 U.S. LEXIS 8382 (Dec. 15, 2014) (reversing exclusion of expert who relied on method that EPA was investigating but had not yet certified because a method is "reliable if the knowledge underlying it has a reliable basis in the knowledge and experience of the relevant discipline"); *Maryland Cas. Co. v. Therm-O-Disc, Inc.*, 137 F.3d 780, 783 (4th Cir. 1998) (noting that in addition to prescribing standards for the admission of scientific testimony, "*Daubert* also described the trial court's role as that of a 'gatekeeper' who should exercise broad discretion in admitting scientific testimony that could later be tested by '[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof.'"); *Ruiz-Troche v. Pepsi Cola of Puerto Rico Bottling Co.*, 161 F.3d 77, 85 (1st Cir. 1998) ("*Daubert* does not require that a party who proffers expert testimony carry the burden of proving to the judge that the expert's assessment of the situation is correct. As long as an expert's scientific testimony rests upon good grounds, based on what is known, it should be tested by the adversary process") (quotations omitted); *B.F. Goodrich v. Betkoski*, 99 F.3d 505, 525–26 (2d Cir. 1996), *clarified on den. of reh'g*, 112 F.3d 88 (2d Cir. 1997) (reversing exclusion of expert "because it is difficult for us to imagine an expert with more experience and knowledge in" area, and if defendants "honestly believe this scientific evidence is weak, they should cross-examine him").

F. Supp. 2d 980, 985 (E.D. Mo. 2007) (rejecting expert who advocated a crash test other than the official Federal Motor Vehicle Safety Standard test); *see also Hartle v. FirstEnergy Generation Corp.*, 7 F. Supp. 3d 510, 522 (W.D. Pa. 2014) (allowing alleged polluter to put in evidence of test method other than the “EPA-approved” method, because even though the use of a test other than EPA’s was “evidence that it may not be the best testing protocol,” “*Daubert* does not require the ‘best’ methodology or data.”).

In contrast to this case law, Lumber’s effort to use *Daubert* to exclude a government agency’s procedure is unsupported by a single case. Instead, Lumber relies on cases in which doctors were not permitted to make implausible “inferential leaps” about the causes of health problems. For example, Lumber relies on *Hayes v. Raytheon Co.*, 808 F. Supp. 1326 (N.D. Ill. 1992), in which the court excluded a doctor’s “novel” assertion that fatal cervical cancer had been caused by “radiant energy” from a computer monitor. Lumber also repeatedly quotes from a case alleging that an incident of food poisoning caused the plaintiff’s diagnosis of fibromyalgia a year later – a causal connection unsupported by any medical reports directly linking the two. *See Gross v. King David Bistro, Inc.*, 83 F. Supp. 2d 597, 60 (D. Md. 2000) (cited in Lumber Mot. at 2, 7, 25). Likewise, Lumber relies on *Henricksen v. ConocoPhillips Co.*, 605 F. Supp. 2d 1142, 1175 (E.D. Wash. 2009), in which the court excluded an expert opinion that exposure to Benzene in gasoline had caused the plaintiff’s later leukemia. In that case, the expert was disagreeing with, not supporting, a government agency’s conclusion (an EPA finding that there was no such causal relationship), and unlike here, the defendant in that case had submitted an “overwhelming body of contradictory” scientific evidence undermining the alleged causal relationship.

The cases on which Lumber relies illustrate the kind of “junk science” at which *Daubert* is aimed. Here, by contrast, there is complete agreement between Plaintiffs’ experts and the

responsible agency, there is no body of contradictory evidence (much less an “overwhelming” one), and CARB’s rationale for promulgating the SOP was supported by extensive, impartial testing. As Plaintiffs’ experts explain, it is Lumber that seeks to present the jury with “expert” testimony based on false information about how laminated products are manufactured and unorthodox test procedures that are nothing more than a public relations “gimmick.”

B. Lumber’s *Daubert* Attack on CARB’s SOP Is Incongruous with Lumber’s Prior Litigation Position: That the Court Should Respect CARB’s “Superior Expertise” on the Best Methodology for Preparing Samples for Testing.

Undercutting Lumber’s *Daubert* attack on CARB’s sample preparation method is its previous briefing that asked a prior court to stay litigation to allow CARB to decide technical issues in the first instance. In March 2015, in the *Balero* litigation (prior to transfer to this Court), Lumber stated: “CARB promulgated the ATCM, and CARB has superior expertise in day-to-day supervision and enforcement authority. The specific issues in this case will turn on CARB’s ... interpretation of its own regulations, based on reasoned scientific conclusions about how to test products for compliance.”⁶³ Lumber argued that “[a]s the author of the regulation and SOP, CARB should answer this issue of first impression, not a court,” because “CARB has devoted years to figuring out how to test products for formaldehyde emissions,” and “answering these questions presents a host of technical and scientific issues that CARB, rather than courts, is best positioned to first address.”⁶⁴ Subsequent to Lumber making these arguments to a federal district court, CARB has continued to inform the public (in the “Business Assistance” portion of its website) that it prepares samples in accordance with its SOP when testing the MDF core in finished products.⁶⁵

⁶³ Fineman Decl., Ex. 7, Lumber’s Motion to Dismiss First Amended Complaint in *Balero v. Lumber Liquidators*, 15-cv-1005-EMC (N.D. Cal.), (ECF No. 12) filed March 11, 2015, at 9-10.

⁶⁴ *Id.* at 12, 16.

⁶⁵ See Fineman Decl., Ex. 8, CARB website “Frequently Asked Questions,” updated February 2016, at number 30, available at www.arb.ca.gov/toxics/compwood/implementation/faq.htm (last

Lumber now tells the Court that CARB’s own sample preparation methodology is so drastically unreliable that the jury may not even *hear* about it. This new position rings false in light of the old one, to say the least. *See Gilmore v. Shearson/American Express, Inc.*, 811 F.2d 108, 113 (2d Cir. 1987) (“Ordinarily, a party may not freely take inconsistent positions in a law suit and simply ignore the effect of a prior filed document.”).

C. The *Daubert* Factors Confirm that Plaintiffs’ Experts Should Be Permitted to Assist the Jury in Understanding and Assessing the Officially Promulgated SOP.

As set forth above, courts generally find that an agency-promulgated methodology satisfies the reliability requirement of *Daubert*, and that no “gate-keeping” is needed to protect a jury from an impartial official agency’s protocol. *See supra* § III.A. Consideration of the *Daubert* factors confirms that there is no reason to deviate from this well-accepted principle here: the technique has been tested, it has been subjected to peer review and publication, there is a known rate of error, there are standards controlling the technique’s operation, and the method has been accepted in the relevant scientific community. *See Daubert*, 509 U.S. at 592-94; *see also Therm-O-Disc, Inc.*, 137 F.3d at 784-85 (*Daubert* “factors” are not “mandatory criteria,” but merely “general observations” by the Supreme Court to aid the district courts in exercising their “significant discretion” to admit expert testimony).

1. The SOP Was Adopted Based on Extensive Testing Conducted by CARB with Participation by Industry-Stakeholders Like Defendant.

CARB’s SOP, which provides a methodology for exposing the MDF core in finished goods for testing in accordance with the Regulation, has been “tested,” such that the first *Daubert* factor

visited Oct. 4, 2016) (“CARB’s sample preparation procedures are documented in: ‘Standard Operating Procedure for Finished Good Test Specimen Preparation Prior to Analysis of Formaldehyde Emissions from Composite Wood Products,’ which can be found at the following link: http://www.arb.ca.gov/toxics/compwood/outreach/compwood_sop_fg_decon_091313.pdf”).

weighs heavily in Plaintiffs' favor. CARB went through a many-year process of evaluating the SOP, relying on its own (unbiased) testing of samples provided from at least 6 industry participants, and on additional data from third parties, including from the AHFA that represents the interests of companies like Lumber. CARB made its data public at the time (and still does), and actively reached out to industry stakeholders to participate in the creation of the SOP. Now that it is confronted with litigation, Lumber and its experts quibble with CARB's evaluation of its own data – quibbles that Lumber can raise on cross-examination – but under the first *Daubert* prong, there is no dispute that the method has been “tested.”

Lumber's argument on the testing prong is easily shown to be meritless. Lumber argues that “there has been only one scientific study of the test methodology since the establishment of the protocol, and it concludes that deconstructive testing ‘can be highly variable’ and that ‘extrapolation of results’ entails a ‘great deal of uncertainty.’”⁶⁶ First of all, this ignores the fact that extensive scientific testing was done *before* the establishment of the protocol, including testing by CARB, the American Home Furnishings Association, and the Joint Task Group on Deconstructive Testing. *See supra* § II.A. In addition, the Pierce paper that Lumber relies on did not evaluate the precision of the CARB SOP; rather than test a single MDF core product before and after deconstruction, as CARB did, it simply measured formaldehyde emission rates of two types of Lumber's flooring products with different manufacturing dates.⁶⁷ The language that Lumber quotes was not suggesting that the SOP gives rise to results that are “highly variable,” but that the testing of products subject to different “manufacturing materials and methods” leads to

⁶⁶ Lumber Mot. at 14 (citing article by J.S. Pierce *et al.*).

⁶⁷ *See* Ex. 4 to Lumber Mot., article by J.S. Pierce *et al.* at 28.

differences in formaldehyde levels – a conclusion very different from what Lumber represents to the Court, and which does not support Lumber’s argument.

Moreover, one of Lumber’s central “testing” arguments is based on a misstatement of Mr. Baker’s testimony: Lumber claims that CARB “us[ed] testing data from veneered products ... and extrapolate[ed] the results” to laminated products, but in fact, in response to a question whether there was “a public study like [the study done on veneered products] done on laminated products”, Mr. Baker testified that CARB “had data” on laminated products that it “shared at a workshop” in the course of developing the SOP.⁶⁸ In any event, the fact that CARB took into account testing on veneered products and particleboard products and found that those tests confirmed the reliability of the SOP for MDF products, is a reasonable conclusion that stands unchallenged. It is hardly the “greatly suspect inferential leap” that Lumber claims.⁶⁹ Indeed, the case from which Lumber quotes went on to say that “experts are permitted to offer opinions based on inferences drawn from similar scientific studies even though the studies are not directly on point.” *Gross*, 83 F. Supp. 2d at 599.⁷⁰

⁶⁸ Fineman Decl., Ex. 1, Baker Dep. at 88:12-18.

⁶⁹ See Lumber Mot. at 7.

⁷⁰ Both of the other cases Lumber cites in making its “testing” argument actually held that expert testimony *should* be admitted even though the testimony was not supported by test results. In *Bitler v. A.O. Smith Corp.*, 400 F.3d 1227, 1235-36 (10th Cir. 2004) (cited in Lumber Mot. at 14), the court rejected precisely the same “testing” argument that Lumber is making here, explaining: “Defendants misunderstand what is at stake in a reliability analysis when they [challenge the expert’s methodology for absence of testing].... The core dispute—whether [the particles] in this case were sufficient to cause leaks—is one the district court could properly determine is a question for the jury.... Thus, because testing is not necessary in all instances to establish reliability under *Daubert*,” the evidence was properly admitted for consideration by the factfinder.” And in *Hassan*, the court admitted testimony about whether certain words are typically used by Islamic extremists, because the testimony was useful to the jury even though it had not been tested. See *United States v. Hassan*, 742 F.3d 104, 130 (4th Cir. 2014) (cited in Lumber Mot. at 14).

2. The “Technique Has Been Subjected to Peer Review and Publication.”

The second *Daubert* factor weighs heavily in Plaintiffs’ favor because the CARB SOP about which Plaintiffs’ experts seek to testify has not only been “reviewed” by the impartial air pollutant emissions scientists at CARB (whom Lumber has extolled for their “expertise” in this specialized area), but has been adopted by CARB, published, and converted into the governing methodology that industry participants and third-party laboratories follow to assess compliance with the Regulation. In addition, CARB sought review and input from industry stakeholders before adopting the SOP, and did not adopt the SOP until it had been “reviewed internally, [and] also externally reviewed.”⁷¹ Subsequent to its promulgation, the SOP has been reviewed and approved of by the Hardwood Plywood & Veneer Association, which concluded: “[T]he CARB deconstruction method was shown to be a viable method for evaluating a raw ... MDF panel’s emissions when provided with only a laminated or finished product.”⁷² The SOP has also been adopted and put into practice by CARB-certified third-party labs and industry participants, including Plaintiffs’ experts. *See supra* § II.A.

This is more than sufficient “peer review and publication” in the context of a specialized technical procedure. *See, e.g., Denton v. Foster Poultry Farms, Inc.*, No. CIV.A. 12-0328, 2013 WL 5924585, at *3 (W.D. La. Oct. 31, 2013) (experts used methods “that were developed by the EPA and state DEQs,” “applied the standard environmental professionals use to determine damages and harm,” and “submitted findings to [the other expert] in the case,” thus satisfying the “peer review” and “reliability” requirements); *see also Pomona*, 750 F.3d at 1045 (in absence of

⁷¹ Fineman Decl., Ex. 1, Baker Dep. at 90:20-22; *see also supra* §II.A.

⁷² *See* Fineman Decl., Ex. 9, “Technical Brief: A Technical Review of the 2013 CARB Laminated Product Study at 1, available at: www.hpva.org/sites/default/files/Technical%20Review%20of%20CARB%202013%20Study.pdf also cited in Ex. 12 to Lumber Mot., Verhey Report at ¶ 20.

an EPA-certified method, expert's method was sufficiently peer-reviewed where it was "practiced by (at least) a recognized minority of experts in the field").⁷³

3. There Is a Known or Potential Rate of Error that CARB and Plaintiffs' Experts Reasonably Conclude Gives Rise to Reliable Results.

The third *Daubert* factor weighs in Plaintiffs' favor because there is a known or potential rate of error of the method, which Plaintiffs' experts (and CARB witnesses) can describe to the jury based on CARB's testing data. Plaintiffs' experts have opined that the rate of error demonstrated by the data supports a conclusion that the SOP is a reasonable sample preparation method. The jury can assess Lumber's expert's contrary argument that the rate of error is so large that the SOP renders all tests that follow it too unreliable to be probative. This assessment will not be difficult for the jury to make: the rate of error is *de minimis* compared to the degree by which Lumber's products exceed the legal limit. Thus, while Lumber attempts to attack Mr. Offermann's testimony because he opines that a rate of error exists, this fact weighs in favor of admitting his testimony.⁷⁴ And as a matter of basic principles, a lack of certainty is inherent in any testing method, and goes to the weight to be assigned to the testimony of the expert, not its admissibility.⁷⁵

⁷³ Lumber, by contrast, relies solely on experts who are advocating a *departure* from the officially promulgated test. Lumber's own authorities again illustrate why its Motion fails. Lumber cites *Sanchez v. Boston Scientific Corp.*, in which the expert was excluded for failing to follow "published testing protocols" No. 2:12-cv-05762, 2014 WL 4851989, at *7 (S.D.W. Va. Sept. 29, 2014) (cited in Lumber Mot. at 18). Similarly, Lumber cites *Bitler v. A.O. Smith Corp.*, 400 F.3d 1227 (10th Cir. 2004) (cited in Lumber Mot. at 14), which states that when an expert disagrees with "otherwise well-established knowledge about regularly occurring phenomenon," *that* is when the testimony may require exclusion. Here, by contrast, Plaintiffs' experts are testifying in *support* of the official methodology and in *support* of well-established knowledge, while Lumber's experts advocate a departure from it.

⁷⁴ Lumber Mot. at 25.

⁷⁵ The only case Lumber cites on the topic of rates of error is a pre-*Daubert* case in which a party unsuccessfully attempted to withhold the data on which its expert had relied. The case is therefore completely unresponsive of Lumber's argument. *See Wright v. Jeep Corp.*, 547 F. Supp. 871, 874 (E.D. Mich. 1982) (cited in Lumber Mot. at 19-20).

Lumber makes much of the fact that CARB has not publicly disclosed its internal “uncertainty factor” that dictates how many parts per million above the legal formaldehyde emission limit a product must measure for CARB to take enforcement action. Lumber asserts that “without knowing CARB’s ‘uncertainty factor,’ it is impossible for any third-party to use the Deconstructive Testing Protocol as an accurate surrogate for testing the emissions rate of a raw core.”⁷⁶ Setting aside the fact that this argument applies to the actual emission test that Lumber does not challenge, and not simply the SOP,⁷⁷ the argument is an overblown logical fallacy: The size of the violation that must occur before CARB will take enforcement action is not the pertinent question in this case – the pertinent question is whether Lumber’s products are likely to violate the Regulation. A certified third-party tester, like Dr. Verhey’s laboratory, is perfectly capable of performing CARB’s published methodology and measuring the emissions to determine whether they exceed the limit. If the results show (as Plaintiffs’ do) that Lumber’s products *dramatically* exceed the limit, *i.e.*, by multiples of the threshold, CARB’s “uncertainty factor” is wholly irrelevant. To refer back to Mr. Baker’s analogy, a speed radar reading showing that a driver was going 120 miles per hour (or 75 mph) in a 65 mile per hour zone would not be inadmissible in a personal injury case simply because the police do not publicize the minimum threshold above the speed limit at which they will issue a ticket. And as Mr. Baker put it, in the case of significant violations, “all the radar guns will agree, you’re definitely in excess of the speed limit.”⁷⁸ “[T]his is very similar” to “the procedures that a third party certifier” uses when measuring formaldehyde emissions from MDF in finished goods. *Id.*⁷⁹

⁷⁶ See Lumber Mot. at 19.

⁷⁷ See Fineman Decl. Ex. 1, Baker Dep. at 46:7-47:15.

⁷⁸ Fineman Decl., Ex. 1, Baker Dep. at 50:2-25.

⁷⁹ Lumber also seeks to portray Mr. Offermann’s statements as supporting Lumber’s contention that “the variability of deconstructive testing must be ‘very high’” (Lumber Mot. at 26), but Lumber does so only by miscomprehending Mr. Offermann’s point. Mr. Offermann opined

4. There Is No Variability in the “Existence and Maintenance of Standards” – the SOP Is the Single Standard that Is Universally Used in this Field.

The fourth *Daubert* factor weighs heavily in Plaintiffs’ favor because the “existence and maintenance of standards controlling the technique’s operation” are indisputable: they are set forth in the SOP itself. Indeed, that is why it is called a “Standard Operating Procedure,” and that was the purpose for which CARB promulgated it.⁸⁰ All certified labs that offer the service of measuring formaldehyde emissions from MDF in finished goods for CARB compliance use the SOP.⁸¹ Unsurprisingly, Lumber does not cite a single case other than *Daubert* on this factor.

5. CARB’s SOP Has “General Acceptance” in the Field.

Finally, the “theory or method has been generally accepted by the” relevant community. The process by which to remove laminate before testing has been adopted by the agency charged with enforcement, as well as by the certified laboratories that assist companies in assessing their compliance with the Regulation. It is used by Lumber’s competitors to test their goods for compliance. Lumber has not identified a single alternative method of sample preparation that is used in the field (much less one that is more accurate than the official method, or more widely accepted). Lumber argues that the fact that the American Society for Testing and Materials, of which Plaintiffs’ expert Mr. Offermann is a voting member, “has not sanctioned deconstructive testing” means that the method has not been generally accepted.⁸² This assertion, without any

that variance in repeat measurements of Lumber’s experts’ testing of finished goods (*i.e.*, repeating exactly the same measurement on the same sample twice) of 20% to 200% would be “very high.” Ex. 11 to Lumber Mot., Offermann Report at ¶ 54. In other words, if a sample’s true formaldehyde content was 0.010 ppm, but it measured anywhere from 0.002 to 0.020 ppm when tested twice using the same method, this would be “very high variability.” Lumber then argues that variation of 50% must also be “very high,” but that does not follow. A variation of 50% means that if a sample’s true formaldehyde content was 0.010 ppm, it might measure between 0.005 and 0.015 ppm – a level of uncertainty that is nearly twice as precise.

⁸⁰ See Fineman Decl., Ex. 1, Baker Dep. at 91:7-15.

⁸¹ See, *e.g.*, *Id.* at 100:24-101:18.

⁸² Lumber Mot. at 22.

explanation of whether the test method has been brought before the ASTM for consideration (it has not), or how ASTM determines which methods to consider “sanctioning,” is meaningless, and Lumber certainly fails to point to any other sample preparation method that has been given preference by the ASTM or anyone in the industry. Thus, the SOP methodology has been “generally accepted” by the relevant community.⁸³

Indeed, Lumber itself has now agreed to follow this standard as part of a settlement agreement with CARB. Lumber has agreed not to “ship to California any Product that fails testing using the SOP sample preparation method.”⁸⁴

In short, the *Daubert* factors confirm the obvious: Plaintiffs have not proffered junk science evidence that “has a greater potential to mislead than to enlighten.” *Westberry v. Gislaved Gummi AB*, 178 F.3d 257, 261 (4th Cir. 1999) (citing *U.S. v. Dorsey*, 45 F.3d 809, 815-16 (4th Cir. 1995)) On the contrary, the testimony of Plaintiffs’ experts is necessary to allow the jury to see through the invalid challenges proffered by Lumber in its attempt to discredit CARB’s official sample preparation methodology.

D. Lumber Can Argue that Finished Goods Should Be Tested in “Finished Form,” But that Legal Argument Is Not a Basis for the Court to Exclude Plaintiffs’ Experts From Relying on CARB’s SOP.

CARB spent years conducting experiments, reviewing data, and conferring with industry stakeholders before adopting the SOP. Its purpose was to provide industry participants with clarity about how finished goods would be tested, and to protect companies that played by the

⁸³ Again, Lumber’s cite does not support its position. Lumber relies on *Fireman’s Fund Ins. Co. v. Canon U.S.A., Inc.*, 394 F.3d 1054, 1058 (8th Cir. 2005) (cited in Lumber Mot. at 22), wherein an expert was excluded from opining about the source of a fire where the expert’s “experimental tests” assumed various prerequisite equipment malfunctions that the expert could neither explain nor replicate, which was contrary to the industry standard protocol for investigating fires.

⁸⁴ See Fineman Decl., Ex. 10, Settlement Agreement and Release, at p. 5 ¶ 6, available at: www.arb.ca.gov/enf/casesett/sa/lumber_liq_sa.pdf (last visited Oct. 4, 2016).

emissions rules from those who might otherwise violate the rules to reduce their costs and thereby “undercut the more legal company’s products.”⁸⁵ Plaintiffs’ experts properly rely on the SOP in formulating their opinions.

Lumber’s real position in this litigation is not that the SOP is unreliable, but that finished goods containing MDF should be tested in “finished form,” rather than by first exposing the MDF. That is a purely legal contention, not a challenge to the reliability of expert testimony. And, although it is outside the scope of this Motion, Lumber’s legal contention fails under the plain language of the Regulation: As Mr. Baker testified, in describing the Regulation, “we do not have emissions standards for laminated products or finished goods[;] [w]e have emission standards for [MDF]... so we have to remove the laminate ... in order to expose the underlying [MDF] for emission testing.”⁸⁶ A *Daubert* motion is not the mechanism for Lumber to press its faulty interpretation of the Regulation.

IV. CONCLUSION

For all of the foregoing reasons, Lumber’s Motion should be denied.

DATED: October 11, 2016

Respectfully submitted,

/s/ Steven J. Toll

Steven J. Toll (VSB No. 15300)

E-mail: stoll@cohenmilstein.com

Douglas J. McNamara (*Pro Hac Vice*)

E-mail: dmcnamara@cohenmilstein.com

Sally M. Handmaker (*Pro Hac Vice*)

Cohen Milstein Sellers & Toll, PLLC

1100 New York Ave NW, Suite 500

Washington, DC 20005

⁸⁵ Fineman Decl., Ex. 1, Baker Dep. at 105:20-106:13; *see also, e.g., id.* at 74:7-24 (describing CARB presentation to the Kitchen Cabinet Makers Association on deconstructive testing because “[c]abinets are finished goods, so it was pertinent to their interests” to understand CARB’s protocols).

⁸⁶ *Id.* at 97:4-21; *see also* Ex. 11 to Lumber Mot., Offermann Report at ¶¶ 85, 91-95 (explaining why Lumber’s proposal of measuring finished floor boards against a testing standard that applies to emissions from exposed MDF core makes no sense).

202.408.4600 (Telephone)
202.408.4699 (Facsimile)

/s/ Steve W. Berman

Steve W. Berman (*Pro Hac Vice*)
E-mail: steve@hbsslaw.com
Hagens Berman Sobol Shapiro LLP
1918 Eighth Avenue, Suite 3300
Seattle, WA 98101
206.623.7292 (Telephone)
206.623.0594 (Facsimile)

/s/ Nancy Fineman

Nancy Fineman (*Pro Hac Vice*)
E-mail: nfineman@cpmlegal.com
Cotchett, Pitre & McCarthy, LLP
840 Malcolm Road, Suite 200
Burlingame, CA 94010
650.697.6000 (Telephone)
650.697.0577 (Facsimile)

Alexander E. Barnett (*Pro Hac Vice*)
Email: abarnett@cpmlegal.com
Cotchett, Pitre & McCarthy, LLP
40 Worth Street, 10th Floor
New York, NY 10113
212.201.6820 (Telephone)
646.219.6678 (Facsimile)

Plaintiffs' Co-Lead Counsel

CERTIFICATE OF SERVICE

I hereby certify that on October 11, 2016, a true and correct copy of the foregoing was filed electronically with the Clerk of this Court using the CM/ECF system, and in accordance with Local Rules and the procedures adopted in the Initial Order and Pretrial Order No. 1A. This filing will cause a copy of the same to be served, via a Notice of Electronic Filing, upon counsel of record in this matter who have consented to electronic service.

/s/ Nancy L. Fineman

Nancy Fineman (*Pro Hac Vice*)

E-mail: nfineman@cpmlegal.com

Cotchett, Pitre & McCarthy, LLP

840 Malcolm Road, Suite 200

Burlingame, CA 94010

650.697.6000 (Telephone)

650.697.0577 (Facsimile)

Plaintiffs' Co-Lead Counsel